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Ticks have always been part of a fauna in and around human settlements, and their significance changed in accordance with the enlargement of settlements and their transformation into towns. The increased rate of urbanization during the last decades has created a new reality for tick existence. Two groups of ticks are of main significance for modern towns: those living under natural conditions of urban surroundings and those having an advantage for life in urban areas. During the process of urbanization, encroachment into forested and uncultivated areas as well as protection of existing green spots (parks, boulevards, gardens) create opportunities for ticks living in nature to also exist under urban and especially suburban conditions. Proper environmental conditions and the presence of appropriate hosts are factors of vital importance for tick existence. Conditions of modern urban and especially suburban environment adequately meet tick requirements in developed European countries. These ticks are mostly three-host species needing different hosts at each parasitic stage, and they cannot live in man-made constructions. Tick species having an advantage for life in urban areas are those that can use one and the same host at all parasitic stages, can starve for a prolonged time, can use as hosts either urban pests (rodents, birds, stray animals) or domesticated animals (pets, poultry), and can live in man-made constructions. The ticks of the *Argas reflexus* group (Argasidae) and the brown dog tick *Rhipicephalus sanguineus* (Ixodidae) comply with practically all conditions necessary for successful survival in urban areas. The latter species has been regularly found in towns further to the north and south of its geographic range where it cannot survive outdoors but establishes 'in-house' populations, mainly as a result of the introduction of dogs infested by ticks. The ability of ticks to transmit numerous human and animal pathogens and the presence of many reservoir hosts in urban and suburban areas create constant danger for human populations and for domestic animals. The prevention of tick attacks in urban areas is a very specific task. Indeed, a comprehensive database including all findings of ticks in a town is the first necessary step. The most threatened areas must be under regular monitoring. Two trends of possible impact on urban ticks should correspond with two main factors of tick existence: change of environmental conditions making them less suitable for tick existence and reduction of the populations of potential tick hosts such as feral pigeons (hosts of *Argas* ticks), stray dogs and cats, and urban rodents. The most obvious thing is that urban inhabitants should be properly informed about the danger of ticks, sites of possible tick attacks, and elementary techniques of self-protection from tick attacks. Recreational areas near large towns where thousands of people may rest at the period of maximal tick activity should be areas of main concern.